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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/434,559 | 11/12/1999 | TOM LEE SORENSEN | DF-7141 | 4098 |
| 7: | 590 10/23/2002 | | | |
| Zenith Electronics Corporation 2000 Millbrook DRIVE Lincolnshire, IL 60069 | | | EXAMINER | |
| | | | HOYE, MICHAEL W | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2614 | 1 - |
| | | | DATE MAILED: 10/23/2002 | \mathcal{O} |

Please find below and/or attached an Office communication concerning this application or proceeding.

| 7 | | Application No. | Applicant(s) | | | |
|---|--|--------------------------|--|--|--|--|
| Office Action Summary | | 09/434,559 | SORENSEN, TOM LEE | | | |
| | | Examiner | Art Unit | | | |
| | | Michael W. Hoye | 2614 | | | |
| Period fo | The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | | |
| 1) | Responsive to communication(s) filed on | <u> </u> | | | | |
| 2a) | This action is FINAL . 2b)⊠ Thi | s action is non-final. | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | | |
| | Claim(s) <u>1-24</u> is/are pending in the application. | | | | | |
| | 4a) Of the above claim(s) is/are withdraw | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| | Claim(s) <u>1-24</u> is/are rejected. | | | | | |
| | Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. Application Papers | | | | | | |
| 9) 🔲 🗆 | The specification is objected to by the Examiner. | | | | | |
| | 10)⊠ The drawing(s) filed on <u>2/1/00</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| 11)[] 7 | 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| | 1. Certified copies of the priority documents | have been received. | | | | |
| | 2. Certified copies of the priority documents have been received in Application No | | | | | |
| Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | |
| a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | |
| Attachment(s) | | | | | | |
| ?) 🔲 Notice | of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informal Pa | PTO-413) Paper No(s) stent Application (PTO-152) | | | |

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DETAILED ACTION

Claim Objections

1. Claims 20 and 21 are objected to because of the following informalities: In claims 20 and 21 the claimed "data casting guide" should be --data casting system--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 3. Claims 3-5 and 15-17 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The instant application/disclosure merely discloses that the operator interface module 21 can be in the form of a liquid crystal display screen of a cellular telephone or personal digital assistant (PDA). However, the disclosure is simply insufficient with respect to how to incorporate both a broadband receiver and EPG data processing functionality in the PDA, telephone, and cell phone environments. Consequently, one could not make and use the invention without undue experimentation.

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Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1, 7-12, and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Schneidewend et al (USPN 6,182,287), cited by the examiner.

As to claim 1, note the Schneidewend et al reference which discloses a device for identifying types of data transmitted on multiple channels of a digital broadcast signal. The claimed scanning receiver is met by input processor 13 in Figure 2, which is capable of tuning to the digital broadcast signal on selected channels (col. 2, lines 42-44 & lines 65-col. 3, line 1), and whereby the digital broadcast signal includes at least one digital television programming packet and at least one data packet (col. 4, lines 44-48). Schneidewend et al discloses a demodulator (item 15, Fig. 2) coupled to the receiver 13 and adapted to demodulate the digital broadcast signal (col. 3, lines 1-2). The claimed detector coupled to the demodulator and adapted to detect

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the at least one data packet is met by elements 17 & 100, in Figure 2 (col. 3, lines 5-8, 41-44 & col. 4, lines 9-12). The claimed memory coupled to the detector is met by unit 60, element 62, the claimed memory being adapted to store data guide software code for identifying the type of data contained in at least one data packet and the channel on which the data is available, the data guide software further being adapted to enable the data on any channel selected by an operator to be accessed is met by col. 3, lines 41-53 and Figures 2-4. The claimed processor coupled to the memory and adapted to execute the data guide software code is met by elements 62 & 64 in Figure 2 (col. 3, lines 35-38 & 54-55). The claimed operator interface module coupled to the processor and being adapted to display the identified types of data and the channels on which the identified types of data are available is met by display 50 in Figure 2 (see col. 4, lines 35-53), and the claimed operator interface module further being adapted to enable any displayed channel to be selected is met by remote unit 70 in Figure 2, and by on screen display menu lists as shown in Figures 3 and 4 (also see col. 6, lines 7-25).

As to claim 7, the reference discloses a data packet including a link to a website, an operator interface module enabling the website to be selected, and a processor enabling the website to be accessed as shown in Figures 3 and 4 (see col. 3, lines 63-67 – col. 4, lines 1-8).

As to claim 8, the reference discloses a device wherein the data guide software code generates a data guide in menu format for display on the operator interface module as shown in Figures 3 and 4.

As to claim 9, the reference discloses a device wherein the operator interface module enables the operator to scroll through the menu before selecting a particular channel as shown in Figure 4, by elements 957 and 955.

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As to claim 10, note the Schneidewend et al reference which discloses a method of providing a data guide summarizing types of data transmitted in a digital broadcast signal and the channels corresponding to the types of data. The claimed step of receiving the digital broadcast signal containing digital programming packets and data packets is met by input processor 13 in Figure 2, which receives the digital broadcast signal (col. 2, lines 42-44 & lines 65-col. 3, line 1). The step of demodulating the digital broadcast signal is met by a demodulator (item 15, Fig. 2), which demodulates the digital broadcast signal (col. 3, lines 1-2). The claimed step of detecting the data packets is met by decoders 17 and 100, as shown in Figure 2 (col. 3, lines 5-12 & 41-44). The step of storing the data guide based on information contained in the data packets is met by col. 3, lines 14-17 & col. 5, lines 15-23, and the step of displaying the data guide is met by Display 50, in Figure 2 (col. 5, lines 21-27).

As to claim 11, the Schneidewend et al reference discloses the method of claim 10 wherein the digital broadcast signal is transmitted in multiple channels as represented ultimately by a program guide shown in Figure 4 where the digital broadcast signal may originate from television, satellite, or other broadcast sources (col. 4, lines 5-8 & 64-67), and wherein the receiving step is performed by scanning through the multiple channels as described by receiving the (television) signals and processing the program or channel information (col. 3, lines 20-23 & 35-38).

As to claim 12, the reference discloses the step of selecting one of the identified channels and gaining access to data transmitted on the selected channel as described in col. 6, lines 47-55.

As to claim 18, the Schneidewend et al reference discloses a data casting system. The claimed receiver adapted to receive a digital broadcast signal containing at least one digital

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television packet and at least one data packet is met by col. 2, lines 65-67 – col. 3, lines 1-2, 41, and 44-48. The claimed detector coupled to the receiver and adapted to detect at least one data packet, and detect types of data transmitted within the data packet or packets and channels on which the detected types of data are available is met by elements 17 & 100, in Figure 2 (col. 3, lines 5-8, 41-44 & col. 4, lines 9-12). The claimed operator interface module coupled to the detector and adapted to display the detected types of data and the channels on which the detected types of data are available is met by display 50 in Figure 2 (see col. 4, lines 35-53).

As to claim 19, the reference discloses the data casting system of claim 18 further including a processor coupled to the detector as met by element 60 in Figure 2 containing a processor or processors (elements 60, 62, & 64, col. 3, lines 55-60). The claimed processor for executing data guide software is met by col. 3, lines 48-55. The claimed data guide software generating a menu based on the types of data and channels detected by the detector is met by col. 4, lines 38-41, and displaying the menu on the operator interface module is met by the display shown in Figures 3 and 4.

As to claim 20, the Schneidewend et al reference discloses the data casting system of claim 19 wherein the claimed operator interface module allows any of the displayed channels to be selected, which is met by remote unit 70 in Figure 2 and by on screen display menu lists as shown in Figures 3 and 4 (also see col. 6, lines 7-25) for selecting displayed channels. The claimed data guide software and processor connecting the operator interface module to the selected channel is met by the process described in col. 6, line 47 – col. 7, line 7.

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6. Claims 22-24 are rejected under 35 U.S.C. 102(a) as being anticipated by Klosterman et al (USPN 5,940,073), cited by the examiner.

As to claim 22, note the Klosterman et al reference which discloses a computer readable storage medium of a digital program receiver (col. 13, lines 18-23) having data guide software stored thereon (col. 12, lines 52-60), wherein the data guide contains a list of the types of data receivable by the digital program receiver and the corresponding RF channels in which the data is present, as shown in Figures 3(a) and 6(b).

As to claim 23, the Klosterman et al reference discloses a computer readable storage medium wherein the data guide is a menu as shown in Figure 6(b).

As to claim 24, the Klosterman et al reference discloses a computer readable storage medium wherein the menu contains selectable items as shown in Figures 3(a) element 320, 6(a) element 620, and 6(b) elements 620 & 640.

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 2, 6, and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneidewend et al (USPN 6,182,287).

As to claim 2, the Schneidewend et al reference discloses the device of claim 1 and further discloses the claimed processor comprising a central processing unit as described in col.

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3, lines 55-60, where in an alternative implementation only a single microprocessor is used. Schneidewend et al also discloses an operator interface module comprising a video monitor as claimed, shown in Figures 1 and 2, in element 50 (col. 5, lines 26-28), and an input device as shown in Figures 1 and 2 as a keyboard, a mouse, or a remote control unit 70 (see col. 7, lines 42-48). Schneidewend et al does not specifically disclose a personal computer (PC) as having a broadcast receiver. However, the examiner takes Official Notice that it is notoriously well known in the art of television receivers to equip PC's with broadcast receivers since they are essentially equivalent to set-top boxes or other devices of similar nature for the advantage of providing television programming in conjunction with the PC environment for integrated use of television reception and the internet. Therefore it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to have modified the device claimed for use in a PC for the advantages as previously stated above.

As to claim 6, the Schneidewend et al reference discloses an operator interface module comprising a display screen of a television as shown in Figure 2, element 50 (see col. 5, lines 26-28), in addition to Figures 3 and 4 representing the display screen. Schneidewend et al does not specifically disclose a device wherein the processor comprises a processing unit of a television. However, the examiner takes Official Notice that it is notoriously well known in the art of television receivers to incorporate the functionality of a set-top box device (or processing unit) within the processing unit of a television for the advantage of consolidating separate items into one resulting in further advantages of cost and space savings. Therefore it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to allocate the processing unit as part of a television for the advantages as stated above.

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As to claim 13, the Schneidewend et al reference discloses the method of claim 10 performed by a central processing unit as described in col. 3, lines 55-60, where in an alternative implementation, only a single microprocessor is used. Schneidewend et al also discloses a method wherein the displaying step is performed using a video monitor as claimed, shown in Figures 1 and 2, in element 50 (col. 5, lines 26-28). Schneidewend et al does not specifically disclose that the method uses a central processing unit of a personal computer (PC). However, the examiner takes Official Notice that it is notoriously well known in the art of data guides summarizing types of data transmitted in a digital broadcast signal to use the central processing unit of PC's equipped with broadcast receivers since they are essentially equivalent to set-top boxes or other devices of similar nature for the advantage of providing digital television programming or other broadcast data in conjunction with the PC environment for integrated use of television reception and the internet. Therefore it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to have modified the method claimed to use the central processing unit of a PC for the advantages as previously stated above and display the data using a video monitor.

As to claim 14, the Schneidewend et al reference discloses the method of claim 10 wherein the displaying step is performed using a video screen of a television as shown in Figure 2, element 50 (see col. 5, lines 26-28), in addition to Figures 3 and 4 representing the display screen. Schneidewend et al does not specifically disclose the method of claim 10 performed by a processor of a television. However, the examiner takes Official Notice that it is notoriously well known in the art of television receivers to incorporate the method of using a set-top box device (or processing unit) within the processing unit of a television for the advantage of consolidating

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separate items into one, resulting in additional advantages of cost and space savings. Therefore it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to allocate the method of a processing unit as part of a television for the advantages as stated above.

9. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schneidewend et al (USPN 6,182,287) as applied to claims 18-20 above, and further in view of Klosterman et al (USPN 5,940,073).

As to claim 21, the Schneidewend et al reference discloses a data casting system that includes at least one link to a website as shown in Figures 3 and 4. Schneidewend et al does not specifically disclose a channel including at least one link to a website. Klosterman et al teaches a data casting system with at least one channel including at least one link to a website as shown in Figure 6(b) where the channel "KRON" lists the program Seinfeld with a link to a website as shown in element 640 (see col. 9, lines 19-34). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the data casting system of Schneidewend et al with a link to a website such that at least one channel of the system includes at least one link to a website as taught by Klosterman et al. One of ordinary skill in the art would have been lead to make such a modification since data casting systems using program or channel guides of the type described above would include channels with at least one link to a website in systems that incorporate the use of both broadcast channels and internet access.

Conclusion

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Darbee et al. (USPN 6,130,726) – Discloses a program guide on a remote control display.

Florin et al. (USPN 5,594,509) – Discloses a program guide with shopping selections.

Huang et al. (USPN 6,437,836) - Discloses remote control/PDA with a program guide.

Robbins et al. (USPN 5,784,095) – Discloses a program guide with different broadcast programming and data including video output and digital audio channels.

Sampsell, Jeffrey Brian (USPN 6,219,839) – Discloses an electronic resources guide using data and broadcast programming from various resources.

Shimakawa et al. (PCT WO 98/57497) – Discloses broadcast channel data in a guide format.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoye whose telephone number is (703) 305-6954. The examiner can normally be reached on Monday - Friday from 8:30 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

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(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Michael W. Hoye October 15, 2002

JOHN MILLER

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600